

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,450	07/31/2003	Ramazan Benrashid	WGS-2003-A1	3840
Andrew F. Sayl	7590 07/31/2007 ko Jr.	EXAMINER		
1014 Crooked Oaks Lane			KOSLOW, CAROL M	
Seabrook Island, SC 29455		ART UNIT	ART UNIT	PAPER NUMBER
			MAIL DATE	DELIVERY MODE
			07/31/2007	PAPER -

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/632,450	BENRASHID ET AL.			
		Examiner	Art Unit			
		C. Melissa Koslow	1755			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,						
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	·					
1)⊠	Responsive to communication(s) filed on 24 Ju	ne 2007.				
2a) <u></u> ☐	This action is FINAL . 2b)⊠ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)🖂	4) Claim(s) 1-3,5,7-12,18-22 and 26-36 is/are pending in the application.					
	4a) Of the above claim(s) 28-33 is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
	6) Claim(s) 1,8,18-22,26,27 and 34-36 is/are rejected.					
	7) Claim(s) <u>2,3, 5, 7 and 9-12</u> is/are objected to.					
8)[Claim(s) are subject to restriction and/or	election requirement.				
Applicati	on Papers					
9)⊠ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority (ınder 35 U.S.C. § 119					
12)	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a))-(d) or (f).			
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
dee the attached detailed Office action for a list of the certified copies flot received.						
			•			
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
	e of References Cited (P10-892) of Draftsperson's Patent Drawing Review (PT0-948)	Paper No(s)/Mail Da	ate			
	mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	5) Notice of Informal P 6) Other:	Patent Application			

Application/Control Number: 10/632,450

Art Unit: 1755

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 June 2007 has been entered.

Claims 28-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made without traverse in the reply filed on 15 April 2006.

The amendments to the claims have overcome the 35 USC 112 rejection over claim 5. Applicant's arguments with respect to the remaining rejections have been fully considered but they are not persuasive.

The amendment filed 24 June 2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The deletion of the formula on page 11 is new matter by deletion.

Applicant is required to cancel the new matter in the reply to this Office Action.

The disclosure is objected to because of the following informalities: The formula on page 12 is not an alkyl or dialkyl substituted trialkloxysilane or dialkoxysilane. These phrases imply that one or two of the alkoxy groups in trialkloxysilane, which has the formula (RO)₃SiH and RO is an alkoxy group, or dialkoxysilane, which has the formula (RO)₂SiH₂ and RO is an alkoxy group, is replaced by an alkyl group. The formulas on page 12 and figure 1 show that the SOG is

Art Unit: 1755

produced from an alkyltrialkxoysilane or a dialkyldialkoxysilane. Given this, the description of the silane as an alkyl or dialkyl substituted trialkloxysilane or dialkoxysilane is incorrect and should be corrected throughout the specification. The correct names for these silane are alkyl trialkloxy silane; dialkyl dialkoxy silane or alkyl dialkoxy silane. Appropriate correction is required.

Claims 8, 18 and 35 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Line 21 on page 12 through line 2 on page 13 teach the dopant is an organic material, such as an organic dye or a metal complex or a phosphor dopant nanoparticles, such as a YAG based phosphor or a moisture sensitive phosphor. Claims 8, 18 and 35 teach the phosphor dopant can be an organic material selected from an organic dye or a metal complex. This is different from what is taught in the specification. This discrepancy needs to be corrected.

The amendments to claims do not overcome the rejection. The claims still state the phosphor material is a organic material, which is not found in the specification. The rejection is maintained.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1755

Claim 1 is indefinite since the description of the silane as an alkyl or dialkyl substituted trialkloxysilane or dialkoxysilane is incorrect for the reasons given above in the objection to the disclosure.

The amendments to the specification do not overcome this rejection.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 18-22, 26, 27 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,818,721.

This reference teaches producing a silicic acid polycondenstate by reacting diphenylsilane diol with a silane which can have the formula R₂Si(OR')₂, where R' is and alkyl and R can be an C 1-18 alkyl, such as octyl, in an alcohol in the presence of a catalyst. This is the claimed process and is identical process of figure 4. This is the claimed process and is identical process of figure 2 and 3. Thus one of ordinary skill in the art would expect the resulting polycondenstate to be a hybrid glass/polymer inherently having formula I, when R is methacyloxypropyl, or inherently having formula II or IV, where R is octyl. Thus one of ordinary skill in the art would expect the resulting polycondenstate to be a hybrid glass/polymer inherently having formula III. Column 7, line 65 through column 8, line 41 teaches fillers, which are known light scattering materials, dyes, which are known to be organic materials, UV absorbers or UV light blocking materials and antioxidants, which are oxygen scavengers, can be added to the polycondenstate. The reference teaches the reaction can contain boron, aluminum, titanium or zirconium coupling agents, such as titanium propoxide. While the reference does not teach the addition of phosphors, it teaches the addition of any dye to enhance the optical

properties of material. Phosphorescent dyes and fillers are known in the art, and are added when it is desired to have a material that exhibits phosphorescent optical properties, such as in light guides. Therefore, one of ordinary skill in the art would have found it obvious to use phosphorescent dyes or particles as the taught dye and filler to impart phosphorescent properties to the material and the resulting combination would have yielded predictable results to one of ordinary skill in the art at the time of invention. *KSR Inter'l Co. v. Teleflex inc.*, 82 USPQ2d 1385 (2007). The reference suggests the claimed process and material.

In response to applicant's argument that there is no suggestion that the taught composition will provide a spin-on glass material that is useful in the production of devices such as waveguides, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case the processes and the precursor compositions are the same as those claimed. There has been no showing that the taught composition is not a sol-gel spin-on glass nor would it act as one. Applicants argue that the reference does not teach or suggest the addition of a phosphor dopant. The Examiner acknowledged this and then proposed why it would have been obvious to one of ordinary skill in the art to add a phosphor dopant to the taught composition. Applicants argue there is no specific disclosure of the suggested combination. KSR Inter'l Co. v. Teleflex inc. foregoes this argument that a specific teaching, suggestion or motivation is required to support a

Application/Control Number: 10/632,450 Page 6

Art Unit: 1755

finding or obviousness. See *Ex parte Smith*, USPQ 1396 (Bd. Pat. App & Interf. June 25, 2007. Applicants argue the phosphor dopant must be YAG or nanoparticles, but claims 18 and 34 teach the phosphor dopant can also be an organic dye. The rejection is that it would have been obvious to use a phosphorescent dye as the dye taught in the reference. The rejection is maintained.

Claims 2, 3, 5, 7 and 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1 and 8 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112 set forth in this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk July 27, 2007 C. Melissa Koslow Primary Examiner Tech. Center 1700